EXHIBIT 1

```
1
    UNITED STATES DISTRICT COURT OF NEW JERSEY
    CAMDEN DIVISION
2
    *********
3
    IN RE: BENICAR (OLMESARTAN)
    PRODUCTS LIABILITY LITIGATION MDL No. 2606
4
    *********
5
6
    SUPERIOR COURT OF NEW JERSEY
    ATLANTIC COUNTY
7
    *********
8
    IN RE: BENICAR (OLMESARTAN) MCL No. 299
    MEDOXOMIL) LITIGATION
9
    *********
10
11
            ***PROTECTED INFORMATION***
12
13
             VIDEOTAPED DEPOSITION OF
14
            JERROLD R. TURNER, MD, PhD
15
16
             Thursday, February 16th, 2017
17
                    9:14 a.m.
18
        Held At:
19
             Campbell Campbell Edwards & Conroy, PC
20
             One Constitution Plaza
21
             Boston, Massachusetts
22
23
    REPORTED BY:
24
    Maureen O'Connor Pollard, RMR, CLR, CSR
```

		TTOTO	
	Page 2		Page 4
	APPEARANCES:	1	- m
3	FOR THE PLAINTIFFS:	2 9	Gallivan and Brown letter to the editor titled Olmesartan induced
4	ADAM SLATER, ESQ. (By videoconference)		enterocolitis104
	MAZIE SLATER KATZ & FREEMAN, LLC	3	SI V Turning State September 200 Construction in the Factor State State Construction of the Construction o
5	103 Eisenhower Parkway	4 10	Drug-Induced Enteropathy 125
6	Roseland, New Jersey 07068 973-228-9898	5 11	Marietta, et al article titled Drug-Induced Enteropathy125 Freeman article titled Drug-induced Sprue-like Intestinal
	aslater@mskf.net	6	Disease 137
7		7 12	
8	-and-	8	Condo Diboabo143
"	PETER N. FOUNDAS, ESQ.	9 13	Setty, et al article titled Distinct and Synergistic Contributions of Epithelial Stress and Adaptive Immunity to Functions of Intraepithelial Killer Calls
9	ROBINS KAPLAN, LLP	١	Distinct and Synergistic
10	800 Boylston Street Boston, Massachusetts 02199	10	and Adaptive Immunity to Functions
1.0	617-859-2720	11	of Intracpithelial Killer Calls and Active Celiac Disease 170
11	pfoundas@robinskaplan.com	12 14	Marietta, et al article titled
12	EOD THE DECEMBANT DAICOUL CANWAYO - ATHE	13	of Intraepithelial Killer Calls and Active Celiac Disease
13	FOR THE DEFENDANT DAICCHI-SANKYO and THE DEPONENT:	14 15	Rubio-Tapia, et al article titled
14		15	Severe Spruelike Enteropathy Associated With Olmesartan
1 -	BRUCE R. PARKER, ESQ.	16 16	Choi and McKenna article titled
15	VENABLE LLP 750 E. Pratt Street	17	Olmesartan-Associated Enteropathy.
16	Baltimore, Maryland 21202		Histologic Findings239
	410-244-7534	18	
17	brparker@venable.com	19 17	Olmesartan-associated enteropathy: results of a national survey274
19	VIDEOGRAPHER: Christopher Coughlin	20	-
20		18	Kulai, et al article titled Images of the Month. Duodenal Villous Atrophy in a TTG-Negative Patient Taking Olmesartan: A Case Report and Review of the Literature280
21	Present via phone: Hilary Kelly, Esq.	21	of the Month. Duodenal Villous
	Daiichi-Sankyo	22	Taking Olmesartan: A Case Report
22	,	23	and Review of the Literature280
23		24 19	FDA Drug Safety Communication322
		24	
	Page 3	1	Page 5
			1 450 5
1	INDEX	1	PROCEEDINGS
2	EXAMINATION PAGE	1 2	_
2	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD		PROCEEDINGS
2	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6	2	PROCEEDINGS THE VIDEOGRAPHER: We are now on the
2 3 4	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302	2 3 4 rec	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a
2 3 4 5	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6	2 3 4 rec 5 vid	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies.
2 3 4 5 6 7 8	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318	2 3 4 rec 5 vid 6	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and
2 3 4 5 6 7 8 9	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS	2 3 4 rec 5 vid 6	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies.
2 3 4 5 6 7 8 9	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE	2 3 4 rec 5 vid 6	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and
2 3 4 5 6 7 8 9	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral	2 3 4 rec 5 vid 6 7 the	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in
2 3 4 5 6 7 8 9	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE	2 3 4 rec 5 vid 6 7 the 8	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar
2 3 4 5 6 7 8 9 10	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation,
2 3 4 5 6 7 8 9 10	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (OI 11 Civ	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, vil Action Number 15-2606(RBK)(JS), all cases,
2 3 4 5 6 7 8 9 10 11	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of
2 3 4 5 6 7 8 9 10 11	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition Responses and Objections to Plaintiffs' Notice of Oral Deposition Responses and Objections to Plaintiffs' Notice of Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, vil Action Number 15-2606(RBK)(JS), all cases,
2 3 4 5 6 7 8 9 10 11 12 13	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of
2 3 4 5 6 7 8 9 10 11 12 13 14	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (OI 11 Civ 12 in t 13 Nev	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, he United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify
2 3 4 5 6 7 8 9 10 11 12 13	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify triselves for the record. MR. SLATER: Adam Slater for the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	EXAMINATION PAGE JERROLD R. TURNER, MD, PhD BY MR. SLATER 6 BY MR. PARKER 302 BY MR. SLATER 318 EXHIBITS NO. DESCRIPTION PAGE 1 Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (OI 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify inselves for the record. MR. SLATER: Adam Slater for the intiffs.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify inselves for the record. MR. SLATER: Adam Slater for the intiffs.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai 18	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the intiffs. MR. PARKER: Bruce Parker for Daiichi.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai 18 19 plai 20 21	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify inselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the intiffs. MR. PARKER: Bruce Parker for Daiichi. THE VIDEOGRAPHER: The court reporter
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai 18 19 plai 20 21 22 is N	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the intiffs. MR. PARKER: Bruce Parker for Daiichi. THE VIDEOGRAPHER: The court reporter Maureen Pollard, and she will now swear in
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Notice to Take Videotaped Oral Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai 18 19 plai 20 21 22 is N 23 the	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the intiffs. MR. PARKER: Bruce Parker for Daiichi. THE VIDEOGRAPHER: The court reporter
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	EXAMINATION JERROLD R. TURNER, MD, PhD BY MR. SLATER BY MR. PARKER BY MR. SLATER BY MR. SLATER BY MR. SLATER BY MR. SLATER EXHIBITS NO. DESCRIPTION Deposition	2 3 4 rec 5 vid 6 7 the 8 9 Bos 10 (Ol 11 Civ 12 in t 13 Nev 14 15 you 16 17 plai 18 19 plai 20 21 22 is N	PROCEEDINGS THE VIDEOGRAPHER: We are now on the ord. My name is Chris Coughlin, and I'm a eographer for Golkow Technologies. Today's date is February 16, 2017, and time is 9:14 a.m. This video deposition is being held in ston, Massachusetts in the matter of Benicar mesartan) Products Liability Litigation, ril Action Number 15-2606(RBK)(JS), all cases, the United States District Court, District of w Jersey. The deponent is Dr. Jerrold Turner. Will counsel please identify arselves for the record. MR. SLATER: Adam Slater for the intiffs. MR. FOUNDAS: Peter Foundas for the intiffs. MR. PARKER: Bruce Parker for Daiichi. THE VIDEOGRAPHER: The court reporter Maureen Pollard, and she will now swear in

Page 6 Page 8 1 JERROLD R. TURNER, MD, PhD, 1 Do you see that? ² having been first duly identified and sworn, was 2 A. Yes, I do. examined and testified as follows: (Whereupon, Turner Exhibit Number 1, **EXAMINATION** 4 Notice to Take Videotaped Oral BY MR. SLATER: 5 Deposition, was marked for 6 Q. Good morning, Dr. Turner. identification.) A. Good morning. BY MR. SLATER: Q. I introduced myself in a bit of a Q. Have you seen that before right now? ⁹ flurry of activity just a few moments ago, my A. Yesterday. 10 name is Adam Slater, I'm going to take your Q. What I'd like to do now is mark ¹¹ deposition now in the Benicar (Olmesartan) 11 Exhibit 2. We have Exhibit 2. Do you have that ¹² Product Liability Litigation. in front of you? And Exhibit 3. 13 Do you understand that's what we're 13 MR. SLATER: Give him both, please. going to do today? 14 (Whereupon, Turner Exhibit Number 2, A. Yes. 15 Responses and Objections to 16 Q. My understanding is you have had your 16 Plaintiffs' Notice of Oral Deposition, ¹⁷ deposition taken previously as an expert witness 17 and Number 3, 2/15/17 Letter to Adam in other litigation, correct? 18 Slater from Susan Sharko, were marked 19 19 A. Yes, I have. for identification.) 20 20 Q. You understand you're now under oath A. Okay. 21 and must tell the truth in response to every 21 BY MR. SLATER: question I ask you? 22 Q. Doctor, do you see Exhibit 2 and 23 A. Yes. 23 Exhibit 3? 24 Q. If I ask you a question that doesn't 24 A. Yes, I do. Page 7 Page 9 ¹ make sense to you for any reason, for example, I Q. Exhibit 3 is a letter I received ² mispronounce terminology, the question that ² yesterday enclosing the response and objections ³ doesn't make medical sense to you, for whatever ³ to our deposition notice, which is Exhibit 2. ⁴ reason, if the question doesn't make sense to Do you see that? ⁵ you, such that you cannot answer truthfully and A. Yes, I do. 6 completely, you just need to tell me that, and Q. Have you seen Exhibit 2 before right ⁷ then we'll talk about what's unclear and I'll 7 now? try to rephrase the question. Okay? A. No. A. Yes. Q. Have you seen Exhibit 3, which is the Q. Mr. Parker may object to some of my 10 cover letter, have you ever seen that before 11 questions, and if he does, just let him speak, 11 right now? ¹² and then my expectation is in those cases, if 12 A. No. 13 not all cases, you'll go ahead and answer the 13 Q. Let's go through Exhibit 2 for a few 14 question. But I'm sure you've been in 14 minutes, okay? 15 depositions where lawyers object to the form of 15 A. Okay. 16 the question that you probably will hear several Q. The first request was for "Copies of 17 times today, that's not a signal not to answer, ¹⁷ all invoices for work performed in connection 18 it just means he's preserving his rights for the with Benicar/Olmesartan whether for litigation ¹⁹ future, and then you'll go ahead and answer. 19 or non-litigation related consulting, or 20 Do you understand that? ²⁰ litigation related work." 21 21 A. Yes, I do. Do you see that request? Q. Doctor, in front of you should be 22 A. Yes, I do. what's been marked as Exhibit 1, the notice of 23 Q. Okay. Now, I'd like you to look at ²⁴ deposition. 24 Exhibit 6, please?

Page 10 (Whereupon, Turner Exhibit Number 6,

- 2 Copies of three invoices, was marked
- 3 for identification.)
- MR. SLATER: Maureen, you can just
- ⁵ give him all the exhibits. There's no reason
- 6 not to just give it to him. I don't mind.
- ⁷ Let's make it easier.
- 8 BY MR. SLATER:
 - Q. Doctor, what is Exhibit 6?
- 10 A. Exhibit 6 is invoices.
- 11 Q. Is Exhibit 6 the documents you
- 12 produced in response to request number 1 in the
- deposition notice?
- 14 A. Yes, but there's a lot of duplications
- ¹⁵ in here, I think.
- 16 MR. PARKER: I think there are two
- 17 sets.

1

- 18 A. At least two sets.
- 19 BY MR. SLATER:
- 20 Q. It should be three pages, correct?
- 21 A. I think there's only three invoices
- 22 total, right.
- Q. Let's fix it. Let's make it so that
- Exhibit 6 is the three pages it should be, and

Q. Did you prepare for this deposition?

Page 12

Page 13

- A. Yes, I did.
- Q. How much -- all right.
 - How much time have you spent since
- October 9th that has not been placed into one of
- these invoices?
- A. I'm guessing somewhere between 100 and
- 200 hours.
- Q. That's a pretty broad range. Let's
- 10 break it down.
- 11 How much time did you spend preparing
- 12 your report? That was one of the categories you
- 13 gave me.

15

- 14 A. I couldn't tell you.
 - Q. You have no idea?
- A. I haven't gone back through notes.
- 17 That's why I gave you a range. I have not gone
- 18 back in billing.
- 19 Q. Do you have notes that reflect the
- 20 time you've spent that has not yet been placed
- into invoices?
- 22 A. I have my calendar, my overall
- 23 calendar.
- 24 Q. Where is that?

Page 11

- 1 that's it.
- A. Just the first three is fine.
- Q. Okay. Doctor, Exhibit 6, that's a
- 4 three page document now which is invoices dated
- ⁵ April 23, 2016, May 24, 2016, and October 9,
- ⁶ 2016. Are those the invoices you produced in
- ⁷ response to request number 1?
- A. Yes.
- Q. Does that represent all of the time
- that you have spent working on this litigation?
- 11 A. No.
- 12 Q. Tell me what time is not reflected on
- 13 those invoices.

- 14 A. Anything after October 9th.
- 15 Q. Tell me what occurred after October 9.
- ¹⁶ Tell me how much time, and what was done.
 - A. I can tell you that that's when I
- 18 prepared all the reports that I've worked on.
- ¹⁹ I've had several meetings with Mr. Parker,
- ²⁰ several phone calls with Mr. Parker.
- 21 Q. Anything else that you've done since
- ²² October 9 up until the time we sat down and
- 23 started this deposition?
- A. I think in broad terms that covers it.

- A. It's at home on my computer.
- Q. And on that calendar, did you document
- 3 the amount of time that you spent on this case
- 4 since October 9th?
- A. I noted blocks of time I spent, yes.
- 6 Q. And did you label what you spent time
- 7 doing?
- A. No.
- Q. What were you going to do when you
- 10 invoiced them, just arbitrarily do categories,
- 11 or do you have a record of what you actually did
- 12 during those time blocks?
- 13 A. I don't have a specific record in each
- 14 time block. I do think I can generally estimate
- when I look at that how much time was spent on
- ¹⁶ which report.
- 17 Q. Do you have access to your calendar
- 18 from where you are right now?
- 19 A. No, I do not.
- 20 Q. Look at request number 2, please, on
- 21 the deposition notice we marked -- well, look at
- ²² Number 2 actually. Okay? That's with the
- ²³ response. Request number 2 was "Copies of any
- ²⁴ notes, i.e. written or electronic, reflecting

Protected Information - Jerrold R. Turner, M.D., Ph.D. Page 14 Page 16 ¹ consulting or litigation work that has not been 1 those times and at least tell me what the times ² documented in invoices as of the date of the ² are that are documented? 3 deposition." A. Not on my home computer, no. Do you see that request? Q. What's the amount that you are billing 5 A. I do. ⁵ in terms of an hourly rate for the work you're 6 Q. And responsive to that would be the doing in this case? entries on your calendar that you keep on your A. \$500 per hour. computer at home, correct? Q. Does that include deposition time? A. I don't think there's a good way to A. That includes everything. 10 separate those. 10 Q. It includes trial testimony or hearing 11 Q. Sir, I move to strike. I didn't ask 11 testimony if you go to court? 12 you. 12 A. Yes. 13 13 The question is, the time -- rephrase. Q. You estimated that you have 100 to 14 The electronic notes of the time that ¹⁴ 200 hours that you have not yet invoiced since 15 you have spent that has not yet been documented ¹⁵ October 9, 2016, correct? ¹⁶ in the invoices you produced as Exhibit 6 is on 16 A. Correct. your calendar on your computer at home, correct? 17 Q. When are you going to invoice for that 18 A. I don't think that's right. I think 18 time? 19 it asks for consulting or litigation work. 19 A. Certainly by the end of March. 20 Q. Do you -- you don't -- rephrase. Quarterly. 21 You don't consider the work to prepare Q. In looking at your invoices, the first 22 the report, have meetings with Mr. Parker, phone 22 one dated April 23, 2016 documents a three and a calls with Mr. Parker, and prepare for this ²³ half hour document review and phone call with ²⁴ deposition to be consulting or litigation work? ²⁴ Mr. Babington. Is that the first time that you Page 15 Page 17 1 A. Of course I do. ¹ ever did any work in connection with this Q. Okay. So that time is documented on ² litigation? ³ your electronic calendar, and you did not 3 A. Yes. produce copies of that today, correct? Q. Have you consulted for Daiichi A. As I said, I don't think -- I don't ⁵ separate and apart from the litigation work and 6 think an annotation in my calendar that says --6 litigation consulting you're doing? you know, blocks out the morning for working on A. No. ⁸ this case represents work. It's just a space Q. When were you first contacted and 9 holder in my calendar so that I don't get caught ⁹ asked if you would review documents and speak to up in other things there. 10 the representatives of Daiichi in connection Q. Sir, those notes in your calendar ¹¹ with this litigation? 12 document that you did consulting or litigation 12 A. Somewhere in the few months before 13 work that you have not put into an invoice yet, 13 April 23rd, 2016, actually in the --14 correct? 14 Q. It says that your first phone call was 15 A. They document time that I spent, yes. 15 March 31. 16 Q. You didn't produce that today, 16 A. Right. I was trying to finish. 17 correct? 17 Q. You would have been contacted before 18 March 31, right? 18 A. No. 19 19 A. You have to let me finish my answers. Q. I'm going to ask, is there a way to

20

23

A. I don't think so.

21

22

today?

Q. You can't electronically get into your

get that to us before this deposition ends

24 calendar from where you are remotely and look at

Q. Who contacted you first?

²³ February perhaps.

21 on it is March 31st, it would probably be

somewhere in the few months before that,

What I was saying was, given the date

Page 18 Page 20 1 A. I believe it was Mr. Babington. ¹ Turner P. versus GWU, but I'm not certain that 2 Q. Who is he? ² that's what that was, so I have to -- I stand 3 ³ corrected. I don't believe I gave a deposition A. He's a lawyer. Q. Has he been your contact throughout ⁴ for that then. this litigation, your direct contact? BY MR. SLATER: 6 A. Initially, yes. Q. Well, could it be that you gave that 7 Q. And then what happened? ⁷ deposition and didn't list it in your list of 8 A. Then I became connected to Mr. Parker, previous testimony? 9 and that's who my contact has been. A. No, I think all my recent depositions 10 Q. How is it that Mr. -- rephrase. ¹⁰ are there. Anything is possible. 11 Had you ever worked with Mr. Babington 11 Q. Could that deposition have been before ¹² January 1, 2012? in the past before this litigation? A. No, I have not. 13 A. I don't think so. It's certainly 14 Q. Was he the person who initially possible that it happened and it's not 15 approached you? documented there. I don't keep a rigorous list 16 A. I believe so. of what depositions or testimonies I've given. 17 Q. Why did he approach you? Do you have But I went through, and I think it's likely to an understanding of why he contacted you? ¹⁸ be completely accurate. 19 A. Other than my expertise, no. 19 Q. Who was the lawyer who you were 20 Q. Did he tell you that somebody had working with in the Accutane litigation? recommended that he speak to you? 21 A. His name is Matt Griffin. A. Not that I recall. 22 Q. What law firm? 23 Q. Do you hold yourself out through any A. I don't know. service or network whereby people can find 24 Q. Do you know who took your deposition? Page 19 Page 21 1 experts? 1 A. No. A. No. Q. Other than the Accutane litigation, Q. Have you ever been an expert for a 3 have you worked on behalf of any other pharmaceutical company in the past, besides this 4 pharmaceutical company? litigation? A. No, I have not. A. Once. 6 Q. Have you ever consulted for a 7 O. What did that involve? pharmaceutical company outside of litigation? A. That was for Hoffmann-La Roche. A. No. 9 Q. What drug? Q. Have you ever conducted a study with A. Accutane. 10 regard to a pharmaceutical drug? 11 Q. Did you testify? 11 A. I did a small project looking at some 12 A. I did not testify. 12 binding interactions of an agent. It was a 13 Q. What did you do in connection with the 13 number of years ago. It was a small, several Accutane litigation? 14 week project. 15 15 A. I reviewed some of the pathology Q. What was the agent? 16 cases, and I gave one deposition, which is 16 A. I don't remember. That's what I'm documented in the report you received. 17 trying to think. I don't remember. I don't --18 Q. Which case is it that's listed in the I can remember the people in my research lab who 19 report, just so that we have that in the record. did it, it was a small sponsored research 20 (Whereupon, Turner Exhibit Number 4, agreement with that company. And other than 21 Dr. Turner's General Causation 21 that, I don't remember details. 22 22 Statement, was marked for Q. Was anything published out of that 23 identification.) 23 small study? 24 A. I stand corrected. I was thinking of 24 A. No.

Page 22 Page 24 Q. Was anything presented or placed into ¹ in olmesartan? an abstract or a poster presentation? A. Other than the medical literature that A. No. ³ reported it. Q. Were the results of that study ever Q. Meaning you were familiar with the ⁵ shared publicly, or were they only shared with fact that some articles had been published in the company that funded it? the literature, but other than that awareness A. I'm sure they weren't shared publicly. you had no interest in olmesartan, correct? Q. Was that study meant to evaluate A. That's right. potential side effects or risks of this 9 Q. You know Joseph Murray, correct? medication? 10 A. Yes, I do. 11 11 A. No. It was a completely in vitro Q. You respect him? 12 study. A. Yes. Q. Does that study have any relevance to 13 Q. Is he considered perhaps one of the 14 the issues that you're going to -- that you've ¹⁴ most -- rephrase. provided opinions on in this litigation? 15 Is he considered the or one of the 16 A. No, it does not. 16 most respected celiac specialists in the world? 17 Q. Have you conducted any study of 17 A. I think he's one of the most olmesartan? 18 respected, absolutely. 19 A. In the research lab? 19 Q. Joseph Murray is the world's authority 20 Q. Yes. regarding celiac and other disease processes, 21 A. In the research lab, I have not. correct? 22 Q. Did you suggest to anybody that you 22 A. I think specifically regarding celiac 23 thought it would be prudent for you to perform ²³ disease, yes. ²⁴ any sort of in vitro study in a research lab Q. Have you ever spoken with Dr. Murray Page 23 Page 25 1 regarding olmesartan? ¹ regarding olmesartan? A. No. A. I have not. Q. The first time that you spoke with Q. Have you ever attended a presentation ⁴ Mr. Babington was March 31, 2016, according to regarding olmesartan? ⁵ Exhibit 6, correct? A. I have not. 6 A. We may have had e-mails before that, Q. Before you were contacted to act as an but something along those lines, yes. expert in this litigation, what, if any, Q. It says there was a document review. ⁸ articles regarding olmesartan were you familiar ⁹ What documents did you review at that initial ⁹ with specifically? 10 meeting, do you know? A. You know, I've been looking at a lot 11 A. I think they sent me a few articles 11 of articles in the months since then, and I 12 related to olmesartan. 12 don't think I could give you a clear list of 13 13 what I had seen before and what I hadn't. I'm Q. Do you remember what articles they 14 ¹⁴ sure I'd seen the 2012 Mayo Clinic report. And were? 15 A. I couldn't tell you exactly. I would 15 I'm sure I'd seen some other papers, but I ¹⁶ -- I'd be speculating. I could speculate. couldn't specifically tell you which ones. 17 17 Q. Have you published any articles with Q. The second invoice of May 24 bills for document preparation, protocol, phone call 18 regard to olmesartan? 19 A. No, I have not. preparation, and phone call with Mr. Babington 20 Q. Have you given any presentations 20 on May 14.

21

22

23

Do you see that?

Q. It says you spent two and a half hours

A. Yes.

24 on that day?

Q. Am I correct that before you were

²⁴ retained in this litigation, you had no interest

regarding olmesartan?

A. I have not.

22

Page 26

- A. No. The phone call was on May 14. I
- ² think the two and a half hours total was between
- ³ April 23rd and May 24th.
 - Q. Okay. Let me ask you again.
- 5 The two and a half hours that you
- 6 billed would have encompassed all of those
- ⁷ activities you described between April 23 and
- 8 the date of this invoice, May 24?
- 9 A. Yes.
- Q. What protocol are you referring to?
- A. Mr. Babington asked me to put together
- 12 a rough protocol of, if we were going to
- 13 approach these biopsies in a standardized way,
- 14 how we might go about doing that.
- Q. These were biopsies of patients who
- were having their cases reviewed as part of the
- 17 litigation?
- 18 A. Yes.
- ¹⁹ Q. In your clinical practice, it's my
- 20 understanding that you spend most of your time
- 21 on research related activities, is that correct?
- A. Yes, about 70 percent.
- Q. You're at Brigham & Women's now. When
- ²⁴ did you return to Brigham & Women's?

Page 27

- ¹ A. Last February.
- ² Q. At Brigham & Women's, do you have any
- ³ clinical responsibilities?
- ⁴ A. Yes.
- ⁵ Q. What are your clinical
- 6 responsibilities at the Brigham?
- A. It's exclusively GI pathology, almost
- ⁸ exclusively biopsies.
- ⁹ Q. How many hours a week do you have
- 10 clinical responsibility at Brigham & Women's?
- A. I have eight weeks per year, so you
- 12 can break that out any way you like.
- Q. Since you went to Brigham & Women's,
- 14 how many times have you looked at biopsies in
- connection with suspected or identified celiac
- 16 disease?
- A. I couldn't give you an exact number,
- 18 but I'm sure it's quite a few. We see a lot of
- 19 those.
- Q. Estimate for me, how many have you
- 21 seen?

24

- A. Well, an estimate, maybe a couple
- 23 hundred.
 - Q. In the time you've been at Brigham &

Page 28

- ¹ Women's, how many biopsies have you looked at
- ² where there was a suspected or identified case
- ³ of olmesartan enteropathy?
 - A. None.
 - Q. Have you ever looked at a biopsy for a
- ⁶ patient where olmesartan enteropathy was part of
- 7 the differential diagnosis?
- A. Yes.
- ⁹ Q. In your clinical practice?
- 10 A. No.
- Q. Is the first time that you ever looked
- 12 at a biopsy for a patient where olmesartan
- 13 enteropathy was a part of the differential
- ¹⁴ diagnosis in connection with this litigation?
- 15 A. Yes.

19

- Q. In connection with your work in this
- ¹⁷ case, did you speak with any other physician or
- physicians regarding olmesartan enteropathy?
 - A. I did not.
- Q. Not up to the present, you've never
- spoken to another doctor about the subject?
- A. I have not.
- Q. In order to prepare the protocol, what
- 24 did you consult in order to prepare the protocol

Page 29

- ¹ to look at olmesartan enteropathy biopsies?
- ² A. I essentially put together a protocol
- ³ for how I would morphometrically assess a small
- ⁴ intestinal biopsy.
- Q. The third of the invoices within
- ⁶ Exhibit 6 is dated October 9, 2016, and there's
- ⁷ a description. Does that describe the work that
- ⁸ you did between May 24 and October 9?
- 9 A. Yes, it does.
- Q. In your career, outside of this
- 11 litigation, have you ever been asked to consult
- on the question of whether or not a patient had
- olmesartan related illness?
- A. I have not.

- Q. Do you know anybody that you've worked
- ¹⁶ with who has ever -- rephrase.
 - Are there any other pathologists
- you've worked with, either at Brigham & Women's
- or at your prior institutions where you were
- employed, where anybody you worked with was
- ²¹ evaluating, to your knowledge, whether a patient
- ²² had an olmesartan related illness?
- A. Not to my knowledge.
- Q. Let's look back at the deposition

Page 30 Page 32 ¹ notice -- your response actually, Exhibit 2. ¹ celiac. You would not be one of those, correct? Number 3 is "Copies of any notes or A. I guess I don't agree with your ³ other documentation, including PowerPoints, for question. ⁴ any presentations given by Dr. Turner with Q. Are there GI pathologists who have ⁵ regard to (1) Olmesartan/Benicar, and (2) celiac published on celiac? disease." A. Sure. Do you see that request? Q. Are there GI pathologists that one 8 A. Yes, I do. would think of if they had a complex case they Q. Have you ever given any such were looking at and wanted the input of somebody presentation, meaning a presentation with regard who had a lot of experience and knowledge 11 to olmesartan or Benicar? Let's start there. regarding celiac who people would think to 12 A. No. consult around the country --13 13 Q. Have you ever given a presentation A. No, I don't think so. with regard to celiac disease? 14 Q. -- to help with the interpretation of 15 A. In the past I've done a lot of 15 a biopsy slide? ¹⁶ teaching in the medical school. Now I write A. No, I don't think so. Other than textbook chapters that are used worldwide, and 17 generally skilled GI pathologists. ¹⁸ in those, celiac disease is certainly discussed. Q. Request number 4 is "Copies of any 19 Q. Let's talk about a presentation to 19 documents or articles relied upon for the other physicians at a professional conference or opinions set forth in the report served, if not a professional organization. Have you ever 21 listed in the report." And from reading your 22 given a presentation on celiac disease in that ²² response, my understanding is you're not 23 context? ²³ producing anything, because anything you relied 24 on is actually listed in the report and the A. It's possible. I can't be specific.

Page 31

reliance list, is that correct?

A. Well, I also relied on my general knowledge, so I think that we couldn't do that.

But specific articles with specific

⁵ facts that are related to this I think are

listed in my report and my general reliance ⁷ list.

Q. With regard to any particular document ⁹ that you're relying on, those are listed either

in the report or the reliance lists, correct? A. Again, you know, I think there's a

12 broad fund of medical knowledge that I've

accumulated over years, sometimes from specific articles, sometimes from textbooks, sometimes

from multiple experiences, I can't tell you that

none of those played into my thinking. But I

think the specific documents related to

olmesartan are, for the most part, included in

19 my reliance lists.

20 Q. You understand that the reason I'm 21 asking this is so that, if you testify, I will 22 know in advance which specific documents or 23 specific articles you might refer to or rely on ²⁴ for your opinions. In that context, those

- Q. Nothing you can point to right now? A. Nothing specific. I was chair of the ³ intestinal disorders section of the American
- ⁴ Gastroenterological Association, and celiac
- ⁵ disease is the primary disease of that section, 6 and so it's very possible in the course of those
- ⁷ duties I was involved in sessions related to
- celiac disease.

1

I think I may have also done a session 10 related to celiac disease in some of our ¹¹ professional education courses for pathologists ¹² at University of Chicago, but honestly, it's

¹³ been a couple years, and I can't remember in

14 detail.

Q. You're not considered in the field that you practice in to be an authority on celiac disease, are you?

18 A. I'm considered to be an expert in GI pathology generally. I don't know any GI pathologists who are experts just in celiac 21 disease.

Q. I understand that there are some GI pathologists who are known to have a special ²⁴ interest or a subspecialization regarding

Page 33

Page 34 Page 36 ¹ documents or articles are listed in your report ¹ me you saw yesterday, and it doesn't list ² or in the reliance lists, correct? ² anything other than what's in the report, and I A. I don't anticipate calling up any ³ had no notice before now. You realize that, ⁴ specific articles that aren't listed there, or 4 right? in my CV, I guess. 5 A. I need to clarify. I told you I Q. Is there anything that you've asked 6 hadn't seen the deposition notice until just ⁷ for from the lawyers who retained you or were 7 now. working with you that they did not provide you? 8 Q. Oh, I thought you said you'd seen it. 9 A. No. A. Look back at your notes. 10 Q. Are there any documents or materials 10 Q. The record will speak for itself. 11 that you were shown with regard to olmesartan 11 A. Yeah. 12 that you did not list in the reliance list or Q. So is there anything that you saw this 13 the report? ¹³ week, these so-called internal documents, that 14 A. Yesterday -- Tuesday, Tuesday I 14 you are relying on for the opinions that you are 15 received an e-mail with some of the internal offering in this case? ¹⁶ documents from Daiichi, and I don't think I had 16 A. Can you restate that? ¹⁷ time to list those. I just looked at those 17 Q. Sure. ¹⁸ briefly. They've been mentioned in one of the 18 Is there anything that you saw in 19 depositions I'd seen most recently from 19 these internal documents that you saw this week ²⁰ Mr. Leffler, and -- from Dr. Leffler, and I 20 that you are relying on now for the opinions ²¹ wanted to see for myself. So I looked at those you're offering in this case? ²² enough to confirm that they were what I 22 A. I think they would be supportive, and 23 anticipated. 23 I've now internalized them into my knowledge, so 24 Q. Whatever documents you looked at this ²⁴ I can't tell you that I wouldn't refer to one of Page 35 Page 37 ¹ week, or Tuesday I guess you said, did they have ¹ them. I'm sure you've seen them. ² any impact on your opinions? Q. Tell me what documents you have A. I think they were consistent with what ³ internalized into your knowledge that you are ⁴ I expected from MedWatch reports, and the relying on for your opinions in this case? ⁵ internal documentations. MedWatch reports are A. You just asked two questions. Which ⁶ fairly standard, and I know what they look like. 6 one? The internal documentation was an Q. Well, here's the thing. If you read a ⁸ analysis that was mostly encompassed by the document, if you're not relying on it, then we ⁹ Mini-Sentinel reports that I'd seen, so I don't can say we can push those to the side. I only ¹⁰ think they ended up changing my opinion. I do care about documents you're actually relying on ¹¹ think they added to data supporting that. 11 for your opinions. So to be very clear, just 12 12 let me ask you the question clean. Q. Do you have those documents with you 13 13 today? The documents you saw this week, are A. I do. you relying on any particular document that was Q. All right. Did you think maybe you a so-called internal document for the opinions 16 should let me know before we started the ¹⁶ that you're offering in this litigation? deposition that you'd reviewed other documents 17 A. It depends on what you ask me. 18 so I could actually have those and be prepared Q. Well, you served a report, we marked 19 for that? Did you think that would have been a 19 it as Exhibit 4, right? good thing to do? 20 A. Yes. 21 A. I believed that Mr. Parker would do Q. That's the only report you've written 22 that. 22 in this case, right? 23 Q. Well, now I'm telling you, you see the 23 A. No.

24

Q. Let me rephrase.

²⁴ response to the deposition notice which you told

Page 38 Page 40 1 ¹ MedWatch reports. With regard to the subject of general ² causation, Exhibit 4 is the only report you have MR. PARKER: Well, I think -- well, ³ written in this case, right? ³ you'll ask the witness, but that's all he was A. Yes. 4 sent. 5 Q. Does that report contain each of your A. There was -opinions? BY MR. SLATER: A. Yes, it does. Q. Dr. Turner, you saw MedWatch reports, Q. In the course of the report, you you testified to that under oath, right? analyzed certain facts and certain articles. A. Right. There was a table --¹⁰ Are those facts and articles that you discuss 10 Q. How many? 11 11 those that you felt were most important to you A. There was a table summarizing MedWatch 12 in forming your opinions that are set forth in 12 reports at the end of one of those. 13 13 that report? Q. So you didn't see the actual MedWatch 14 14 reports, you just saw the table summarizing the A. I think those were most important, 15 yes. 15 MedWatch reports? 16 Q. Is there anything that you saw this A. In this case I don't think I saw the week, these so-called internal documents, which ¹⁷ actual full reports. I saw the summaries of the 18 you feel is so important that you would have 18 reports. I have seen a couple MedWatch reports 19 listed it in your report if you had seen it 19 in the course of my meetings with Mr. Parker and ²⁰ before you wrote your report? ²⁰ Mr. Christian. 21 A. I think I would have cited it, the But I guess you're right that I saw ²² MedWatch reports, as further anecdotal case 22 the summary of the reports individually, each 23 one had its own line and lots of details, but I ²³ reports that were not particularly ²⁴ well-controlled, like most of the case reports ²⁴ did see the actual MedWatch forms. Page 39 Page 41 ¹ that I -- the published case reports that I Q. When did you see MedWatch forms during ² referred to, but I don't think they would have ² the course of your meetings? When did you see ³ changed anything substantive. 3 those? Q. Do you have a list of what you A. In the last week, I believe 5 reviewed? ⁵ Mr. Christian showed me a couple of them. A. I do. 6 Q. Which ones? Q. The internal documents you saw this 7 A. I don't remember. week which I never knew about until now? 8 Q. Do you have them there? 9 A. Yes. I'm sure you've seen them. 9 A. No. 10 10 Q. No, no. Do you have a list of what Q. How many did you see? 11 11 you saw? A. Less than five, a handful. They were 12 A. Yes, I think I do. 12 consistent with those in the tables of the 13 Q. All right. How am I going to get documents. That was part of why I was asked for that? How can I have that sent to me right now? 14 those documents. 15 MR. SLATER: Mr. Parker, do you have 15 MR. SLATER: Move to strike "they were 16 the ability to e-mail me the list? 16 consistent," etcetera. 17 MR. PARKER: It's two documents, Adam, 17 O. Other than the less than five MedWatch the Caspard report and the Parker report. 18 reports that you saw in the last week, and the 19 That's it. 19 Caspard report and the Parker reports which you 20 MR. SLATER: I'm sorry, you said the ²⁰ were shown two days ago, have you seen any other Caspard report and what? 21 internal documents from Dajichi? MR. PARKER: And the Parker report. 22 A. I don't believe so.

23

MR. SLATER: Well, he just said he saw

²³ That's it. Two documents.

24

Q. Do you have any knowledge of whether

or not the Caspard report -- which addressed

Page 42 Page 44 ¹ celiac disease, correct? become an issue, but I'm going to potentially A. I believe that's true. ² request additional time beyond the seven hours, 3 Q. Do you have any knowledge as to ³ because I'm spending all this time going through ⁴ whether that includes all MedWatch reports that documents that I had no idea he had seen until 5 should have been included in that report if the ⁵ the middle of the deposition. It probably won't ⁶ inclusion criteria were followed strictly within ⁶ be an issue, but if it becomes an issue I just ⁷ Daiichi? ⁷ want to state it for the record. 8 THE VIDEOGRAPHER: Mr. Slater, you 8 MR. PARKER: You did that. broke up on that question. Could you repeat the A. I don't think I -- I expect I should, question? ¹⁰ but I'm not seeing a hard copy of the other 11 MR. SLATER: Sure. I'll ask it again. 11 report. It may be stapled together with 12 Q. Do you have any knowledge as to 12 something else. whether or not the Caspard report actually 13 BY MR. SLATER: includes all of the celiac reports that should 14 Q. We marked the Parker report, right? be included in that report? 15 A. Yes. 16 A. I didn't do my own search of MedWatch 16 Q. Do you see the conclusion by 17 reports, so I couldn't comment on that. ¹⁷ Dr. Crawford Parker where he says there's no Q. You never read Mr. Caspard's 18 need to add a warning to the label about 19 deposition, right? sprue-like enteropathy, or words to that effect? A. I did not read Mr. Caspard's 20 20 A. Can you tell me where you're referring ²¹ to? ²¹ deposition. 22 Q. Have you seen any deposition of any 22 Q. I don't have the report in front of 23 company witness from Daiichi? 23 me, I didn't know you'd seen it, so I'm going by 24 A. No. ²⁴ memory. My understanding is that was his Page 43 Page 45 1 Q. Other than the Caspard report, the ¹ conclusion. ² Parker report, and the less than five MedWatch (Witness reviewing document.) ³ reports, just to be very clear, you have not A. He says that "Based on this ⁴ seen any other Daiichi document, correct? assessment, no change to the existing olmesartan A. Correct. product labeling is recommended." And then he Q. The Parker report, is that the one 6 says --⁷ that concluded there was no need to add a BY MR. SLATER: ⁸ warning to the label about sprue-like Q. Are you aware that --9 enteropathy? 9 A. Can you finish my answer? 10 A. I need to look back at it. 10 Q. I'm sorry, I didn't realize. I 11 Q. Let's throw a sticker on that. 11 thought you were done. I apologize. 12 A. The Parker report? Did you just ask 12 A. No. That's becoming common. about the Parker report? 13 "In view of the findings and Q. The Parker report. Let's mark it just ¹⁴ conclusions of this and prior assessments. so we know what you're looking at. Daiichi-Sankyo proposes to continue" --15 16 (Whereupon, Turner Exhibit Number 7, 16 MR. PARKER: Slow down. We have to 17 Parker report titled Olmesartan and 17 take this down, please. 18 Sprue-like Enteropathy, Bates 18 A. Sorry, sorry. 19 OLM-DSI-0003347042 through 3347100, 19 He goes on to say that "Daiichi-Sankyo 20 was marked for identification.) proposes to continue routine safety surveillance MR. SLATER: Let's mark that 7. And ²¹ for sprue-like enteropathy and celiac disease." ²² let's mark, if you have the Caspard report ²² So I think what he's saying is there's not

Bruce, I don't know if it's going to

²³ handy, let's mark that 8.

24

23 enough -- my synthesis is that there's not

²⁴ enough data to do a lot right now, but that this

Page 46

- ¹ should be watched.
- ² BY MR. SLATER:
- Q. Do you know the date of that report?
- A. It's dated September 28th, 2012. They
- ⁵ were obviously aware -- although that's before
- 6 the publication date, they were obviously aware
- ⁷ of the Mayo report at that time. I guess it's
- 8 just after the publication date of the Mayo
- ⁹ report. Excuse me.
- Q. Are you aware that the position
- 11 Mr. Parker took in that report was rejected by
- 12 the FDA -- rephrase.

18

- Are you aware that the FDA reached a
- 14 different conclusion and required that a warning
- 15 be added to the label for olmesartan?
- A. I'm aware that the FDA changed the
- ⁷ label, or recommended the changes to the label.
 - Q. What, if anything, is significant to
- 19 you about the Parker report?
- A. What was helpful to me about the
- ²¹ Parker report was the specifics of individual
- ²² cases. And appended to it is a detailed table
- 23 that lists individual cases in the MedWatch
- ²⁴ report, and I think it's a fairly exhaustive
 - Page 47
- ¹ list. I can't promise that everything is there,
- ² but it's a fairly exhaustive list.
- ³ Q. You think -- rephrase.
- You're trusting that Crawford Parker
- 5 included all the adverse event reports that
- 6 would have potentially implicated sprue-like
- ⁷ enteropathy? Was that your understanding?
- A. No, I think I just said the exact
- ⁹ opposite.
- Q. You did? Tell me, what was your
- 11 understanding as to what the inclusion criteria
- ¹² was for this report.
- A. That's a different question than you
- 14 asked a moment ago. Let me find those to be
- ⁵ sure that I'm not remembering incorrectly.
- 16 (Witness reviewing document.)
- A. So they used several approaches. The
- first was patients with diarrhea and weight
- 19 loss. The second was serious diarrhea. That
- 20 was it.
- 21 BY MR. SLATER:
- Q. Do you know whether Daiichi had in its
- ²³ database additional adverse event reports, not
- ²⁴ including the Parker report, which would have --

- ¹ which did have the clinical picture of
- ² olmesartan enteropathy that aren't listed? Do
- ³ you know whether there are any such reports?
 - A. So you've made a conclusion in your
- ⁵ question that I can't agree with.
- Q. Do you know whether there are other
- ⁷ reports that aren't listed in that report where
- B patients either had diarrhea and weight loss or
- 9 serious diarrhea that aren't included?
 - A. I don't know that.
- Q. Do you know who Crawford Parker is?
- A. No, I don't, other than his title
- 13 here.

10

- Q. With regard to the Caspard report,
- what, if anything, about it is significant to
- 16 you?
- A. You know, I can't remember anything
- 18 specific. I'm sorry that I don't have a copy of
- 19 it with me.
- Q. With regard to the less than five
- 21 MedWatch reports that you reviewed a week or so
- ²² ago, or in the last week, what, if anything, can
- ²³ you specifically point to in your deposition
- ²⁴ right now that you would say is significant to
 - Page 49

Page 48

- 1 you about those MedWatch reports, specific to
- ² each one?
- A. I think that what's specific to the
- ⁴ MedWatch reports is the same thing that I found
- ⁵ in each of the case reports, is that they were
- 6 wholly uncontrolled, and showed correlation, but
- ⁷ no data really supporting causation.
 - Q. What does correlation mean?
- ⁹ A. Correlation means if something, A,
- 10 happened, then more often than not B will follow
- 11 or be accompanying that.
- Q. The MedWatch reports you saw you
- 13 believe did show a correlation between
- ¹⁴ olmesartan and gastrointestinal illness,
- 15 correct?
- A. In some individual cases there was a
- ¹⁷ correlation.
- Q. Were you shown any adverse event
- 19 reports in which Daiichi performed a causality
 - o assessment internally, when their physicians
- 21 actually evaluated causality?
- A. I don't think so.
- Q. Do you know whether Daiichi actually,
- 24 their internal physicians actually evaluated any

Page 50

- ¹ adverse event reports and made the finding that
- ² the gastrointestinal conditions related in the
- ³ MedWatch report was definitely related to the
- ⁴ use of olmesartan? Do you know if that was
- concluded in any MedWatches?
- A. I'm not aware of any of those.
- Q. If those existed, that would be
- ⁸ something that would be relevant to you in
- reviewing MedWatch reports, right? If they're
- going to show you some, they should show you
- 11 those, right?
- 12 A. I would think those would be worth
- 13 seeing.
- 14 Q. Okay. Did you ask, when you were
- ¹⁵ provided less than five MedWatch reports, if
- there were any others that might be of
- significance?
 - A. I did.
- 19 Q. And what were you told?
- 20 A. I was told that the stack pretty much
- 21 looked like this. It was in reference to the
- 22 stack that Dr. Leffler went through where he
- 23 threw out a couple of them, but felt that the
- others were valid, and so I asked to see those,
 - Page 51
- ¹ and I was shown some that I was told were ² representative of the whole. I clearly didn't
- 3 have the time at that late date to go through
- 4 all 62.
- Q. Are you aware of whether the highest
- 6 level executive in the pharmacovigilance
- ⁷ department testified as to his opinion as to
- 8 whether any MedWatch reports, the adverse events
- 9 reflected in MedWatch reports, were -- there was
- ¹⁰ a causal relationship between olmesartan and the
- ¹¹ gastrointestinal disorder reflected? Do you
- 12 know about that?
- 13 MR. PARKER: Objection.
- A. I'm not aware of any depositions.
- 15 BY MR. SLATER:
- Q. You're not able to tell me, as you sit
- ¹⁷ here now, which MedWatch reports you actually
- 18 saw, right? You can't identify those for me,
- 20 A. No. As you know, they're only
- 21 identified by a series of numbers, and I didn't
- ²² write down the numbers, and I certainly don't
- ²³ remember them.
 - Q. Let's look at the deposition notice,

- ¹ the response, request number 5, "Any
- ² illustrations, PowerPoints, images, charts,
- ³ tables or demonstrative exhibits that may be
- ⁴ used in connection with the Daubert hearing or
- ⁵ testimony of Dr. Turner."
- Do you see where I just read?
 - A. Can you repeat that? You broke up.
- Q. Do you see number 5?
- A. Yes, I do.
 - Q. Have you prepared any illustrations or
- ¹¹ PowerPoints regarding your opinions in this
- 12 litigation?

13

18

24

- A. I have not.
- 14 Q. Have you prepared -- well, rephrase.
 - Are there any images, charts, or
- 16 tables that, if you were testifying, that you
- would consider using as part of your testimony?
 - A. I've taken photomicrographs of some of
- 19 the cases, so in specific cases.
- 20 O. You're talking about cases you've
- 21 reviewed?
- 22 A. Yes.
- 23 Q. Anything else?
 - A. Not related to general causation, no.
 - Page 53

Page 52

- Q. Request 6 is "Documentation of any
- ² research grant you have been provided to study
- ³ Olmesartan/Benicar, or celiac disease, or health
- effects potentially related thereto."
- Are there any such research grants?
- 6 A. No.
- Q. Look at request number 7, please.
- ⁸ "Copies of any documents including protocols or
- ⁹ information about medication side effects, from
- ¹⁰ any hospital or academic institution where you
- 11 have worked, had an appointment, or had
- ¹² privileges, which set forth information related
- to the diagnosis or treatment of any
- 14 Olmesartan/Benicar related medical conditions or
- 15 side effects."
- 16 A. I'm not aware of any.
- Q. Are there any such documents that 17
- 18 you're aware of?
- 19 A. I'm not aware of any.
 - Q. Now let's look at your report,
- 21 Exhibit 4.

- 22 A. Yes.
- 23 Q. Exhibit 4 is several documents that we
- were provided together as one group, and at the

Page 54 Page 56 ¹ beginning is your report on general causation in ¹ There's one, I'm sorry, there's one that I could ² this litigation, correct? ² not get the full text of, so I haven't read that A. Correct. ³ entire article. Q. After that, starting on Page 10, is a Q. Which one is that? ⁵ list of literature cited, and that literature, A. I believe it was Laeis, L-A-E-I-S, is 6 that was actually cited in the report? the first author's name. As far as I could A. Correct. tell, that's not available electronically. I Q. On Page 16 is previous testimony. And did put in a request for it, but I was unable to ⁹ are those the only times that you've testified, get it. or the only cases you've testified in since Q. In your review of medical literature, ¹¹ January 1, 2012 --¹¹ can you point to any article in the 12 A. To the best of my knowledge -peer-reviewed literature where the authors 13 Q. -- other than perhaps that Accutane reached the conclusion explicitly that case we talked about? olmesartan is not associated with sprue-like 15 A. To the best of my knowledge, this is 15 enteropathy? 16 complete. 16 A. Can you state that more specifically? 17 Q. After that page is a document starting Q. Well, let's use the term with Page 1. Is that your up-to-date curriculum ¹⁸ olmesartan-associated enteropathy. You vitae as of January 31, 2017? understand what that term means? 20 A. Yes, it is. A. I understand that people have used 21 21 that term. I'm not sure I entirely understand Q. Let's look at Exhibit 5. 22 (Whereupon, Turner Exhibit Number 5, ²² or agree with how people have used it. 23 Document titled Supplemental Reliance 23 Q. You've used that term, right? 24 List, was marked for identification.) 24 A. I have not. Page 55 Page 57 ¹ BY MR. SLATER: Q. You don't know what Q. Titled "Supplemental Reliance List." ² olmesartan-associated enteropathy means? 3 What is that document? A. I've used that term to reflect what A. It seems to be -- I see. It's stuck others have written in their texts, but I have ⁵ together. Yes, I have it. ⁵ not used it myself because I don't think it Q. What is that document? ⁶ represents something that's factually based. A. I went through -- in response to your Q. What is your understand -- well, let ⁸ request, I went through my library of articles me ask you this. ⁹ and pulled those that I thought I had relied on Is there any article in the 10 in preparing the report for information, but may peer-reviewed literature that reaches the 11 or may not have specifically cited in the 11 conclusion that olmesartan does not cause in any 12 report. ¹² patients what has been termed in the medical Q. Did you compile this reliance list 13 literature olmesartan-associated enteropathy or 14 that's Exhibit 5, or did someone else do it for ¹⁴ sprue-like enteropathy? 15 you? 15 A. Not that I'm aware. 16 A. No, I compiled it. Q. Same question with regard to 17 Q. You typed all those articles yourself? ¹⁷ association, is there any article that concludes THE VIDEOGRAPHER: You broke up, sir. 18 that there is not an association between the 19 Q. You typed this up yourself? 19 two? 20 A. I copied and pasted them from my 20 A. Are we talking about in any patient, ²¹ EndNote library. 21 or in epidemiological studies, or groups of Q. Is it your testimony that you've read patients? You need to be more specific in your ²³ each article on the supplemental reliance list? ²³ question.

24

A. I've read them, maybe not recently.

24

Q. Is there any article in the published

Page 58 Page 60 ¹ peer-reviewed medical literature you can point A. I'm not sure I do, because if you're ² to that concludes explicitly that there is no ² asking what I think you're asking, there could ³ association between olmesartan and what has been be a thousand studies that say we didn't find an 4 termed in the literature olmesartan-associated association and one study that says we found an ⁵ enteropathy or sprue-like enteropathy? Any association, and I would be -- it would be the article that reaches that conclusion? appropriate answer to say no, there's no A. Yes, there's several. articles that concluded there was absolutely no 8 Q. That says there's no association? association in any way possible ever? Is that 9 A. That says there was no association what you're asking? detected in their study. 10 Q. That's what I'm asking. Q. Which articles say there's no 11 A. Yeah, there's no articles that 12 association. Well, let me stop you for a 12 conclude absolutely positively there could second, stop you for a second. never, ever be an association between olmesartan 14 My question is not somebody saying and enteropathy. 15 O. You're familiar with the Rubio-Tapia whether or not they found an association in 16 their study. My question is, is there any 16 article, correct? ¹⁷ article in the peer-reviewed literature where 17 A. Which one? 18 there is an explicit conclusion that olmesartan 18 Q. 2012, the first major article in this 19 is not associated with olmesartan-associated 19 area. ²⁰ enteropathy as that term is used in the 20 A. Yes. 21 literature, or sprue-like enteropathy, any 21 Q. The authors in that study include ²² article that reaches that explicit conclusion? ²² Joseph Murray, correct? A. Well, I think failure to detect an A. Yes. ²⁴ association in a highly powered study would come Q. Dr. Murray and his co-authors conclude Page 59 Page 61 ¹ to that conclusion to the extent that it's ¹ that there is an association between olmesartan ² possible to prove a negative. Proving a ² and either olmesartan-associated enteropathy or ³ negative is obviously impossible or very ³ sprue-like enteropathy, whatever you want to ⁴ difficult. So it depends how you interpret 4 call it, they concluded there was an 5 that. 5 association, correct? 6 MR. SLATER: Move to strike. 6 A. Let me pull the article, please. 7 Q. Is there any article that reaches that (Witness reviewing document.) conclusion that I just asked you, explicitly A. What they say at the end of the states there is no association? 9 article is suggesting that perhaps, and I'm 10 A. Yes. going to paraphrase a little bit, this may be 11 Q. Are you saying that there's articles ¹¹ another example of drug-associated enteropathy where a study was done and they did not find an of which the medical community should be aware. 13 association in their study? Because that's not 13 Elsewhere in the article they conclude ¹⁴ what I'm asking you. 14 that further study is needed. I'm looking for 15 MR. PARKER: Objection. the exact phraseology. I don't think they 16 BY MR. SLATER: 16 conclude that there's a causative relationship, 17 I think they're actually very careful not to Q. That's a different conclusion than what I'm asking you about. conclude that. And I'm looking to see if the 19 MR. PARKER: Objection. exact words you said, an association, are ²⁰ Argumentative. 20 listed. 21 You may answer. 21 BY MR. SLATER: 22 22 A. I'm saying --O. Check the title.

23

24 what you said.

Q. Do you understand my question?

BY MR. SLATER:

A. That's a little bit different than

Protected Information - Jerrold R. Turner, M.D., Ph.D. Page 62 Page 64 O. What's the title of the article? Looking in the second paragraph of the A. The title says "Severe Spruelike discussion on Page 735, let's go to the last Enteropathy Associated With Olmesartan." sentence of that paragraph that starts Q. You understand what those words mean, "Resolution." 5 right? 5 Do you see the word "resolution"? A. Of course I do. A. Yes, I do. Q. So the title of the article is stating Q. It says, "Resolution of the presenting 8 that severe sprue-like enteropathy is associated symptoms and subsequent histologic improvement ⁹ with olmesartan, that's the actual title of the after suspension of olmesartan, in the absence article, right? of clinical evidence of other diseases 11 A. That is the title. associated with enteropathy, suggest that the 12 Q. Did you see in the article where they association is not likely to be due to chance." 13 said they did not believe this was a chance Do you see that? 14 A. Yes, I see that. association? 15 A. I did. I also saw they said that it's 15 Q. There is a spectrum of association, ¹⁶ a case series that lacks all information correct? There's chance associations, and then 17 necessary to prove causality, but rather there's causal associations at the other end of 18 reflects an association. 18 the spectrum, correct? 19 MR. SLATER: Move to strike after "I 19 A. Correct. 20 did." 20 Q. So the authors concluded this is not a Q. So you agree with me that the authors 21 chance association? ²² of the Rubio-Tapia 2012 article titled "Severe 22 MR. PARKER: Objection. 23 Spruelike Enteropathy Associated With 23 BY MR. SLATER: ²⁴ Olmesartan" stated explicitly that they did not Q. They're saying that it's at the other Page 63 Page 65 ¹ believe this was a chance association? You ¹ end, at some part of the spectrum away from ² agree with that statement, correct? ² chance? That's basically what it's saying, A. I'm looking, because I don't think 3 right? 4 that's their exact words. I do see, again, MR. PARKER: Objection. ⁵ where they say that this case series lacks A. No, I think you're reading that

6 information necessary to prove causality, and ⁷ I'm looking for -- I do remember something to 8 the effect of that they thought it was not ⁹ likely due to chance, but they didn't say that 10 it's not due to chance. I'm looking for the 11 wording.

12 MR. SLATER: I'm going to move to 13 strike.

14 Q. Look at Page 735, please, the "Discussion" section. The second paragraph ¹⁶ under the Discussion section starts "We acknowledge." 18

Do you see where I am?

19

24

A. Yes, that's what I was reading from.

Q. In the first sentence they state that this reflects an association, right?

22 A. Well, you'd need to read the whole 23 sentence to be complete.

Q. Okay. Do the authors -- withdrawn.

6 incorrectly. They're being very careful to

exactly not say what you're saying.

8 BY MR. SLATER:

12

Q. You would agree that the Rubio-Tapia 10 study showed an association between olmesartan ¹¹ and severe sprue-like enteropathy, correct?

A. No, I would not.

13 Q. So you disagree with the authors of 14 the study?

15 A. No, I think I agree with their

16 interpretations, but you do have to look at

17 their inclusion criteria. Based on their

18 inclusion criteria, you can't speculate whether

there's an association, because unless there was

²⁰ recovery after withdrawal of olmesartan the

patient was not included in their study. So by

²² definition, the study must show in the subgroup

²³ of patients carefully selected, that those

²⁴ patients had an association.

Page 66 Page 68 1 So -- and you can make an analogy with ¹ not even close. ² flipping a coin. If every time I flip a coin it Q. Is it your opinion that I'm naive? 3 turns up heads or tails, but I only show you the A. No. The question is naive. ⁴ versions where it shows up heads, then you could Q. I mean if you think I'm naive, you ⁵ conclude that flipping a coin was associated should say it. ⁶ with turning out heads if you ignore those that A. I think you're probably quite ⁷ turn out tails. ⁷ knowledgeable. But I think in that area, your That's, in essence, how this study was question was naive. prepared. It's great as something to make the Q. Okay. Has the New England Journal of 10 medical experts aware of, but it doesn't prove Medicine ever published an article that later 11 association because it's not statistically 11 had to be corrected because the information 12 designed to do that. communicated turned out to be wrong? Q. You would agree it was important for 13 A. I'm sure it has. this article to be published so that clinicians 14 O. So am I. So let's not be naive, would be aware of this potential association, 15 Doctor. 16 correct? 16 A. I don't think that's the same thing. 17 A. Yes. But you should also recognize 17 Q. Okay. You've made a comment about where it was published. That also tells you ¹⁸ where the article was published, the Rubio-Tapia 19 something about the importance and impact to the 2012 article. Do I understand you to be medical literature. ²⁰ impugning the value of the Mayo Clinic 21 ²¹ Proceedings, that journal that it was published MR. SLATER: Move to strike after ²² "yes." 22 in? 23 Q. Are the Annals of Internal Medicine A. Well, knowing some of the authors considered to be a high powered medical journal? ²⁴ here, I would suspect that they would have sent Page 67 Page 69 A. Annals of Internal Medicine is a ¹ it to a more reputable journal if that option ² reputable journal. ² had been available to them. And I'm not sure Q. It's considered to be a high powered 3 what -- I have never talked to them, I don't journal, correct? 4 know the track of what this article took, but A. I don't know the impact factor or the 5 this is not what you'd call a highly respected 6 citation rate or anything else about it to ⁶ journal. It's essentially an internal journal. specifically comment on that, but it's a Q. So you're speculating about why they reputable journal. 8 published the article in that journal, right? Do you have those numbers for me? ⁹ You have no idea? 10 10 Q. No, I don't. A. I'm not speculating. I'm telling you 11 A. Then I don't know. 11 that this is essentially an internal journal 12 Q. Is the New England Journal of Medicine 12 with limited stature in the field. And if they ¹³ a high powered journal? 13 felt it was as important a study as you're 14 A. Yes, it is. 14 implying, then I am surprised that they would 15 Q. Are the Annals of Internal Medicine publish it here. ¹⁶ and the New England Journal of Medicine roughly 16 Q. All I'm asking is this. You don't on the same level? 17 know why Dr. Murray and his co-authors chose to A. Not even close. 18 publish the article in the Mayo Clinic 19 19 Proceedings? You don't know, right? O. Okay. 20 A. That's a surprising question. 20 A. It could be for any number of reasons.

21

24 With Olmesartan."

Q. Really? How come it's surprising,

A. Because it's naive to think that those

²⁴ journals are on par with one another. They're

21

23

22 Doctor?

Q. Look at Page 737 of the article,

²³ Features of Spruelike Enteropathy Associated

please, bottom right, Table 3, it says "Clinical

Protected Information - Jerrold R. Turner, M.D., Ph.D. Page 70 Page 72 1 Do you see that? MR. PARKER: Hold on. Objection. 2 A. Yes. ² Argumentative. You can ask your question again. Q. If a patient meets those criteria, do BY MR. SLATER: ⁴ you agree that an association is shown in the Q. Doctor, look at Table 3, the title, ⁵ case of those patients between olmesartan and "Clinical Features of Spruelike Enteropathy 6 sprue-like enteropathy? ⁶ Associated With Olmesartan." A. No. Do you see that? Q. Are you saying that every patient that A. Yes, I do. ⁹ meets that criteria, it's just a coincidence Q. And you see the list of clinical 10 that when they got off the olmesartan that they 10 features? 11 got better? 11 A. Yes, I do. 12 12 A. I'm saying that the title of the table Q. For a patient that has those clinical 13 says these are features associated with 13 features, do you agree that that is a patient in ¹⁴ olmesartan. They don't say diagnostic of, using ¹⁴ which those clinical features are associated ¹⁵ your words, olmesartan-associated enteropathy. 15 with olmesartan? ¹⁶ So I don't think that you should be used that A. That's really kind of circular logic ¹⁷ table for the purpose of which it was clearly 17 the way you phrased it. Do you want to try a 18 not intended. fourth time? 19 Q. Did I say diagnostic? I didn't say 19 Q. No. I want you to answer the that word, Doctor. 20 question. A. You're making a diagnostic conclusion 21 A. It's circular logic, so I have to say ²² in the way you phrased your question. Can we ²² no. read it back? 23 Q. Is there an association that has been 24 Q. I'll ask a different question. I'll ²⁴ established in the literature for at least the Page 71 Page 73 ¹ ask it again. I don't need to read it back. ¹ subset of patients who would meet this clinical ² Here's the question. ² criteria? If a patient meets the criteria in 3 A. No. ⁴ Table 3, do you agree that in those cases those Q. Are there published studies in ⁵ clinical features would be associated with the ⁵ reputable medical journals where they do 6 use of olmesartan? ⁶ conclude that the association exists for A. First, there are no criteria listed in ⁷ patients that have this type of clinical ⁸ Table 3. There are features listed. And criteria? 9 nowhere does it say that meeting these -- having A. If you exclude and make a very 10 these features confirms that the patient has a ¹⁰ carefully selected subset, yes, but only in that 11 specific diagnosis, in this case you're saying ¹¹ context. 12 the diagnosis would be olmesartan-associated 12 Q. The very carefully selected subset ¹³ enteropathy. would be those patients that fit this criteria 14 MR. SLATER: Move to strike. ¹⁴ that's listed as clinical features, correct? 15 15 Q. I haven't used the word diagnosis, A. And others. This is not exhaustive. 16

¹⁶ Doctor, so I just don't understand why you keep

saying it. I'm asking about association.

A. You're saying does that -- can we read

19 the question back?

20 Q. No, we're not going to read the

²¹ question back. I'm going to ask it again to

²² you. I'm not going to use the word diagnosis, I

²³ promise.

A. I know, but you're implying --

- Q. Other clinical features?
 - A. Yes, this is not exhaustive and is not
- 18 sufficient to make that conclusion.
- 19 Q. What other clinical features would you
- add to this table to make it complete? 21
- A. It depends if you're asking about
- associated with or caused by. Are you asking 22
- ²³ about associated with?

17

24 Q. Let's start with associated with.

Page 74

- ¹ A. Associated with, you would like to see
- ² some evidence of a controlled rechallenge that
- ³ really told you that it was due to olmesartan,
- ⁴ or at least a highly controlled dechallenge in
- ⁵ which you could say it was associated.
- Obviously a dechallenge would never be
- oviously a deciralienge would hevel be
- 7 sufficient in a single case for making that
- ⁸ conclusion of causation, but it probably could
- ⁹ be sufficient for saying in that patient it's
- 10 associated and maybe we should just sort of not
- worry about it and give that patient some other drug.
- Q. There are some highly controlled
- ¹⁴ dechallenges in the case reports published in
- the literature, right?
- A. I don't believe so.
- Q. Okay. If you have a patient who --
- 18 let me rephrase.
- 19 I'm going to give you a hypothetical
- 20 patient and ask you a question about the
- ²¹ patient. Okay?
- A. Okay.
- Q. If you have a patient who is taking
- ²⁴ olmesartan for more than two years, and more

- Page 76

 diarrhea, the weight loss, and the villous
- ² atrophy?
- A. Were they IgA deficient?
 - Q. Why would you want to know that?
- A. If they were IgA deficient, they would
- 6 have some chance of having seronegative celiac
- Q. Okay. Let's assume that they are IgA
- ⁹ deficient, however, the patient continued to eat
- gluten both before, during, and after the use of
- olmesartan, and that had no impact on the
- 12 symptoms, meaning the patient had no chronic
- diarrhea, weight loss, or villous atrophy before
- taking the olmesartan, and after stopping the
- 15 olmesartan when the resolution occurred the
- ¹⁶ patient was continuing to eat gluten without any
- restrictions, with that addition to the
- 18 hypothetical, the most likely cause would be the
- 19 olmesartan, correct?
- A. What other agents are they taking?
- Q. No other medications.
- A. Do they have any comorbidities?
- Q. No comorbidities.
 - A. Do they have any evidence of vascular

Page 77

Page 75

- ¹ than two years after starting to take olmesartan
- ² the patient develops chronic diarrhea, weight
- ³ loss greater than 10 pounds, villous atrophy,
- ⁴ the patient tests negative on celiac serologies,
- ⁵ the patient stops taking the olmesartan, and
- 6 over the course of time after that, with no
- ⁷ other change in any medications or any other
- ⁸ changes in diet, the patient's clinical symptoms
- ⁹ of chronic diarrhea and weight loss resolve, and
- 10 the villous atrophy resolves. Okay? That's my
- ¹¹ patient. Do you understand?
- 12 A. Yes.
- Q. In that patient, the most likely cause
- 14 of the chronic diarrhea, the weight loss and the
- villous atrophy would be the olmesartan,
- 16 correct?
- A. I would need to know more about the
- ¹⁸ patient.
- Q. What else would you need to know?
- A. Well, I can give you a hypothetical.
- Q. No, no, no. I have a hypothetical.
- What else would you need to know about that patient to tell me whether or not the olmesartan
- 24 is the most likely cause of the chronic

¹ disease?

- Q. No evidence of vascular disease, other
- ³ than if you want to term hypertension vascular
- ⁴ disease. They have hypertension, that's why
 - they took the olmesartan.
 - A. Do they have -- have they had
- ⁷ autoimmune serologies?
- Q. Yes. They were negative.
- A. Have you done O&P?
- O. What is an O&P?
- A. Ova and parasite test.
- Q. Yes, they were negative. And stool
- ¹³ studies were done, which were negative.
- A. Okay. And they didn't take any other
- 15 drugs at the time the olmesartan was
- 16 discontinued?
- ¹⁷ Q. No.
- A. And they were on a controlled diet
- 19 that was identical?
- Q. They made no changes to their diet,
- ²¹ freely ate gluten the entire time.
- A. Anything else?
- ²³ Q. No.
- A. I mean, was it a controlled diet that

Page 78

1 was the same or not?

- Q. Well, I don't know what you mean by
- ³ the same. You mean did they eat three meals a
- 4 day that were the exact same food? There was no
- ⁵ -- let me answer the question. There was no
- 6 alteration in the diet from before using the
- ⁷ olmesartan, during the olmesartan, and after the
- 8 olmesartan, whatever the person ate generally
- ⁹ did not change.
- A. In that patient, under that setting, I
- would say let's find you a different
- ¹² antihypertensive, there are reports of this in
- ¹³ patients taking olmesartan, and if you stay
- 14 healthy on another antihypertensive we'll call
- 15 it a win. I don't think you can necessarily
- ¹⁶ conclude causation.
- Q. More likely than not that patient, the
- 18 cause of the chronic diarrhea, the weight loss,
- ¹⁹ and the villous atrophy was the olmesartan,
- 20 that's the most likely cause, correct?
- A. Well, I would draw a direct analogy to
- ²² celiac disease and say no.
- Q. In that patient was the most likely
- 24 cause of the chronic diarrhea, the weight loss,

- Page 80 differential diagnosis in that hypothetical as
- we developed it?
- A. To put that at the top of your
- 4 differential diagnosis you'd have to know that
- ⁵ it was a cause. We don't know that.
- 6 Q. Olmesartan would be on the
- ⁷ differential diagnosis for that patient,
- 8 correct?
- ⁹ A. You would have to think about
- olmesartan based on case reports and labels, but
- not based on scientifically rigorous fact.
- MR. SLATER: Move to strike from "but"
- 13 forward.
- Q. Doctor, it's a very simple question,
- 15 yes or no. Would olmesartan be on the
- 16 differential diagnosis as the cause of this
- ¹⁷ patient's clinical presentation as we described
- 18 it?
- MR. PARKER: Objection.
- ²⁰ A. No.
- 21 BY MR. SLATER:
- Q. What -- now you're saying olmesartan
- 23 is not on the differential diagnosis? You just
- 24 said a question ago it is on the differential

Page 81

Page 79

- ¹ and the villous atrophy, tell me what the most
- ² likely cause was. If it's not olmesartan, what
- 3 is it?
- ⁴ A. I can't name a specific cause. But
- ⁵ what I can tell you is that, for example, in
- ⁶ celiac disease, response to a gluten-free diet
- ⁷ is insufficient to conclude that it's celiac
- ⁸ disease. I don't know how withdrawing the drug,
- ⁹ which would be the same as withdrawing the
- 10 gluten from the diet, is sufficient then to
- ¹¹ conclude that it must be due to the drug.
- MR. SLATER: Move to strike after
- 13 "but."
- Q. Doctor, have you ever been involved in
- 15 the actual diagnosis of a patient that actually
- ¹⁶ had a gastrointestinal disorder where a
- ¹⁷ differential diagnosis was used?
- ¹⁸ A. Of course.
- Q. For the patient that we have described
- ²⁰ in this hypothetical, olmesartan as a cause
- ²¹ would be at the very top of the differential
- ²² diagnosis, correct?
- A. I don't think it could be.
- O. What else would be on that

- ¹ diagnosis, you realize that, right?
- ² MR. PARKER: Objection.
- A. You realize you asked the question
- ⁴ differently.
- 5 BY MR. SLATER:
- 6 Q. Look, you know what? There's a
- 7 transcript and you're going to testify in a
- 8 courtroom, so, you know, every answer you give
- 9 you own. You know that, right?
- MR. PARKER: And you own your
- 11 questions. Let's go on, Adam.
- MR. SLATER: Believe me, I do.
- 13 BY MR. SLATER:
- Q. Let me ask you this, Doctor. The
- answer you just gave to this hypothetical, would
- 16 you be comfortable if I took this video and put
- 17 it on YouTube for all your colleagues around the
- ¹⁸ United States to see that testimony?
- ¹⁹ A. Absolutely.

- Q. Okay. You would agree with me that
- 21 there have been some patients who have developed
- 22 what is described in the Rubio-Tapia article as
- 23 severe sprue-like enteropathy caused by
- ²⁴ olmesartan? There are some patients in the

2

Page 82

- ¹ world where that has happened, you would agree
- ² with that, correct?
- A. No.
- Q. So all of these reports, the case
- ⁵ reports and all the other studies, in every one
- ⁶ of those patients it was a coincidence that the
- patient was taking olmesartan, got off
- olmesartan, their use of olmesartan in every one
- of those cases was coincidental and had nothing
- 10 to do with their illness, is that your
- 11 testimony?
- 12 A. My previous response was in response
- 13 to your question. We can ask the court reporter
- to read back the question if you'd like.
- 15 Q. I just asked you a new question.
- 16 Is that your testimony?
- 17 A. Can you repeat that question somebody?
- 18 Q. She'll read it back to you.
- 19 (Whereupon, the reporter read back the pending question.) 20
- 21 A. There's not sufficient evidence to
- ²² conclude either way.
- 23 BY MR. SLATER:
- 24 Q. So you don't have an opinion one way

- ¹ causal association.
 - Q. Let me ask you this question.
- 3 Do you understand what reasonable

Page 84

Page 85

- degree of medical certainty means?
- A. Yes, I do.
- 6 Q. What do you think it means?
- A. It means more likely than not.
- Q. Okay. Are you aware that there are
- physicians at some of -- at the top celiac
- 10 centers in the United States who have diagnosed
- ¹¹ patients with sprue-like enteropathy caused by
- 12 olmesartan? Are you aware that that has been
- 13 happening in the United States the last five
- 14 vears?
- 15 A. I'm aware that patients in those
- 16 sentence have -- some patients have done well
- 17 when olmesartan was withdrawn.
- 18 Q. For those patients, you realize they
- ¹⁹ were diagnosed with, we can call it sprue-like
- enteropathy or olmesartan-associated
- enteropathy, you realize that was their
- ²² diagnosis at the top celiac centers in the
- ²³ United States for some patients? Do you realize
- 24 that? Yes or no.

Page 83

- or the other on that question?
 - A. No, I do have an opinion.
- Q. You just said the information -- the
- ⁴ evidence is not sufficient one way or the other.
- ⁵ That means you can't state to a reasonable
- ⁶ degree of medical certainty one way or the other
- on that question, right?
 - MR. PARKER: Objection.
- A. You asked me if I believed it was
- coincidence, and I said there was not enough
- 11 information to conclude whether or not it was a
- ¹² coincidence.

- 13 BY MR. SLATER:
- 14 Q. Okay. If it was not a coincidence,
- then that would mean that in some cases there
- was a causal relationship between the olmesartan
- ¹⁷ and the illness, right?
- 18 A. If that were true, and it was not --
- 19 it was shown rigorously not to be a coincidence,
- 20 that would mean in those specific patients there
- would be an association, yes.
- 22 Q. It would be a causal association,
- 23 right?
- 24 A. I think you need more to conclude a

- A. Yes, that's a label that's been put on
- them, absolutely.
- Q. You're not telling this jury that you
- 4 think that every single time a patient got off
- olmesartan and got better, in the absence of
- ⁶ changing any of their other medications or
- changing their diet in any other way, you're not
- saying that you think it was coincidence that
- 9 they got better after taking off -- stopping the
- 10 olmesartan in every one of those cases? You're
- 11 not saying that, are you?
- 12 A. I don't think I've seen documentation
- 13 of the case you just described.
- 14 Q. You haven't seen documentation of a
- 15 case where a patient got off of olmesartan and
- got better where their other medications weren't
- 17 changed and their diet wasn't changed?
 - A. I think the reports that we've seen
- are pretty superficial in those descriptions,
- and there really isn't sufficient data to know 21 that.
- 22 MR. SLATER: Why don't we do this.
- Why don't we take a break for about 5 or
- ²⁴ 10 minutes.

Page 86 Page 88 1 MR. PARKER: Okay. We've got to 1 Do you see that? 2 ² refill the water jug anyway, I've been pretty A. Yes. much consuming all of it. Q. And then it says, "Side effects that MR. SLATER: Let's go off the video, you should report to your doctor or health care 5 please. professional as soon as possible," and then THE VIDEOGRAPHER: Going off the there's a list. 7 record. The time is 10:42. Do you see that list? 8 (Whereupon, a recess was taken.) A. Yes, I do. 9 (Whereupon, Turner Exhibit Number 8, 9 Q. And you see that list includes 10 Printout from Brigham & Women's 10 diarrhea, vomiting, and weight loss. 11 Hospital website on Olmesartan 11 Do you see that? 12 12 tablets, was marked for A. I think this is essentially the same 13 identification.) as the label on the bottle, is that right? 14 THE VIDEOGRAPHER: Back on the record. MR. SLATER: Move to strike. 15 The time is 10:55. Q. Do you see what I just pointed out, it 16 BY MR. SLATER: says diarrhea, vomiting, and weight loss? 17 Q. Doctor, I just provided you what we've A. Yes. 18 marked as Exhibit 9, and I can tell you I 18 Q. And you agree that diarrhea, vomiting, 19 printed this off the website at Brigham & and weight loss are side effects that a patient 20 Women's Hospital two days ago. You can see it may experience from receiving olmesartan, 21 in the top left, February 14, 2017. correct? 22 MR. FOUNDAS: Adam, it's actually 22 A. It's possible. 23 Exhibit 8. 23 Q. You agree that in some patients that 24 MR. SLATER: Oh, it's Exhibit 8? ²⁴ occurs, correct? Page 87 Page 89 1 MR. FOUNDAS: Yes. A. No. We've been over that. 2 MR. SLATER: I'll start over. Q. So Brigham & Women's when they say 3 BY MR. SLATER: that these side effects can occur as a result of Q. Doctor, do you see in front of you the patient taking the medication, you disagree 5 Exhibit 8? with the hospital you work at? A. You're breaking up a lot. 6 MR. PARKER: Objection. Q. Doctor, do you see in front of you A. I don't think the document says that Exhibit 8? these occur. 9 A. Yes, I do. BY MR. SLATER: 10 Q. This is a document I printed off the 10 Q. So you think they're listing random 11 Brigham & Women's Hospital website, you can see side effects there that they don't -- that your in the top left February 14, 2017, from the hospital doesn't think occur from olmesartan? 13 health library at your hospital. 13 That wouldn't seem to make sense, would it? 14 14 Do you see that? MR. PARKER: Objection. 15 A. Yes, I do. 15 A. No. They're protecting themselves Q. Have you seen this before? 16 from legal challenge and from lawsuits by 16 17 A. I have not. reproducing what I presume is on the label. I 18 Q. And this is a page regarding haven't memorized the olmesartan label, but I'm 19 19 olmesartan tablets. guessing this is pretty close to what the label 20 Do you see that? 20 represents. 21 21 A. Yes, I see that. MR. SLATER: Move to strike. Q. And if you go down a few lines it 22 BY MR. SLATER: 23 says, "What side effects may I notice from 23 Q. The label for olmesartan and the

²⁴ receiving this medicine?"

²⁴ information about sprue-like enteropathy is in

Page 90

the label in part because the FDA thinks that

² language is necessary, right?

- A. Right.
- Q. Do you know if Daiichi objected when
- 5 the FDA asked them to put a warning for
- ⁶ sprue-like enteropathy in the label? Do you
- ⁷ know whether Daiichi objected to that?
- A. No, I don't know.
- Q. Do you know what warnings Daiichi
- wrote internally before the FDA sent them the
- ¹¹ language regarding Daiichi's internal assessment
- 12 of what the warning should say?
- ¹³ A. No.
- Q. Would you expect that Daiichi, the
- 15 manufacturer, the seller of the drug would have
- ¹⁶ extensive knowledge about these side effects
- ¹⁷ caused by the drug?
- ¹⁸ A. I would imagine that they've done
- 19 careful studies, yes, and know everything they
- 20 can know.
- Q. Do you know what the term drug --
- ²² rephrase.
- Do you know what the phrase olmesartan
- ²⁴ induced enteropathy means?

- Page 92
- ² by those terms.
- Q. Well, when you say it's implied,
- 4 that's what it means, right?
- 5 MR. PARKER: Objection.
- ⁶ A. It's what's implied.
- ⁷ BY MR. SLATER:
- Q. Well, it's implied, so it's not clear
- ⁹ to you what the word induced means? You don't

A. I would say that that's what's implied

- understand that word? Should we pull out a
- 11 dictionary, or Wikipedia or something?
 - MR. PARKER: Objection.
- A. Sure, let's get a dictionary. That's
- 14 okay.

12

- MR. PARKER: Come on, guys, let's move
- ¹⁶ on.
- 17 BY MR. SLATER:
- Q. Let's do this. You don't know what
- 19 induced means, is that what you're telling me?
- ²⁰ You know what it's implied to mean, but you
- 21 don't know what it actually means, that's what
- ²² you're telling the judge and the jury, right?
- A. No. I know what induced means, and I
- ²⁴ don't think it means exactly the same thing as

Page 93

Page 91

- ¹ A. I've heard people use that rarely.
- Q. Do you know what it means?
- ³ A. I know what they're implying, yes.
- ⁴ Q. Doctor, olmesartan induced enteropathy
- ⁵ means sprue-like enteropathy caused by
- 6 olmesartan, correct?
- 7 MR. PARKER: Objection.
- ⁸ A. That's the implication.
- 9 BY MR. SLATER:
- Q. That's what it means, right?
- MR. PARKER: Objection.
- A. I answered you, right?
- 13 BY MR. SLATER:
- Q. I don't think you did. I didn't ask
- ¹⁵ you if it's implied. It's a very simple
- 16 question.
- Olmesartan induced enteropathy means
- enteropathy caused by olmesartan, correct?
- A. If it meant exactly that, why don't
- 20 they just say enteropathy caused by olmesartan?
- MR. SLATER: Move to strike.
- Q. Doctor, I'm not here to argue with
- you. It's a simple yes or no question.
- Is that what the terms mean?

- ¹ caused.
- Q. Do you know what the head of
- ³ pharmacovigilance for Daiichi in the United
- ⁴ States said when I asked him if olmesartan
- ⁵ induced enteropathy means enteropathy caused by
- 6 olmesartan? Do you know what he said?
- ⁷ A. No, I don't.
- 8 Q. Would you be interested in knowing
- 9 what he said?
- 10 A. Sure.
- Q. He said it means caused by. Is that
- 12 helpful to you in defining that term?
- MR. PARKER: Objection.
- A. Then that's what it means to him. But
- 15 I interpret induced and caused to be subtly
- 16 different.

17

- Is he a native English speaker? Maybe
- 18 he doesn't get the vocabulary quite right.
- 19 BY MR. SLATER:
- Q. I guess you don't know who he is, so
- ²¹ we'll keep you in the dark on that one.
 - A. Okay.
- Q. Do you know if Daiichi uses the term
- ²⁴ olmesartan induced enteropathy in their internal

Page 94 Page 96 ¹ documents to describe this condition that we're ¹ talks about severe diarrhea and weight loss, ² talking about? ² correct? A. I don't believe I saw it in the A. Can we -- let's be specific. Do we 4 documents that I saw. have a copy of the label? Q. Would it be helpful to you to know Q. No, we don't. You don't know if the 6 that -- rephrase. label says that? If, in fact, Daiichi in its own A. I don't know the specific words. You 8 internal documents refers to the condition as seem to be very fond of slipping in words that olmesartan induced enteropathy, that would be change nuanced meanings, so I'm cautious about that. I don't know the exact words on the label significant to you, since they presumably are ¹¹ experts regarding the side effects caused by ¹¹ by memory. 12 their drug, right? Q. Is there a warning in the label for 13 MR. PARKER: Objection. 13 olmesartan that warns of sprue-like enteropathy? A. It depends. It would certainly be 14 A. Let me see if I have a copy of the 15 label. 15 something to be aware of, but it wouldn't be the only factor in my thinking, because then I would 16 (Witness reviewing document.) ¹⁷ be just accepting their conclusion based on data ¹⁷ BY MR. SLATER: 18 I haven't seen. So it would really depend on Q. You don't know if the word sprue-like 19 why they were making that conclusion. 19 enteropathy appears in the label for the 20 BY MR. SLATER: ²⁰ olmesartan drugs? Doctor, you don't know if Q. If there are physicians employed by 21 that term appears in the label? ²² Daiichi who found in reviewing adverse event 22 A. I'm looking for the label. ²³ reports that gastrointestinal illness Q. I'm asking you, without looking at it ²⁴ representing sprue-like enteropathy in terms of you don't know if that term appears in the Page 95 Page 97 ¹ label? It's a yes or no question before you ¹ the collection of symptoms was caused by ² olmesartan in some patients, that would be very ² pull the label out. significant to you, correct? 3 A. I would like to --A. Sure, I'd very much like to see those Q. I'm instructing you not to look at the 5 label to answer this question. data. 6 Q. Nobody showed it to you, right? MR. TURNER: You can't instruct him 7 ⁷ not to look at the label. You've asked him Q. And, in fact, if you were to be shown three times. that data, that could change your opinions in Doctor, do the best you can in that case, correct? answering the question. A. It depends on what the data were, but 11 You can't instruct him what he can and 12 certainly. 12 can't do, Adam. 13 Q. Coming back to Exhibit 8, I think you 13 MR. SLATER: I can. 14 BY MR. SLATER: ¹⁴ said that you believe that the listing of 15 diarrhea, vomiting, and weight loss as potential 15 Q. Doctor, without looking at the label, 16 side effects with olmesartan, I think you said ¹⁶ do you know whether the term sprue-like ¹⁷ that's your understanding of essentially what enteropathy appears in the label for the 18 the label says about sprue-like enteropathy, 18 olmesartan drugs? 19 19 correct? A. I believe it likely does, but I'm not 20 ²⁰ entirely sure that it's that exact phraseology, A. No. I said I think that this 21 information generally reproduces what's on the and that's why I'd like to check and be precise.

22

24

23 there, pull it out.

Q. And the label for olmesartan includes

²⁴ a warning about sprue-like enteropathy which

23

Q. Wonderful. If you have the label

(Witness reviewing documents.)

Page 98

Page 100

- ¹ BY MR. SLATER:
- Q. Did you find it, Doctor?
- A. No, I'm not finding an actual reprint
- 4 of the label, I'm sorry.
- Q. You have the FDA safety notification
- 6 right in front of you, right?
- 7 A. Yes, I do.
- 8 Q. Right in the beginning it says that
- 9 "Olmesartan can cause sprue-like enteropathy,"
- 10 right? Doctor, the very first paragraph, do you
- 11 see it?
- A. Yes. And I think they're using the
- 13 regulatory phraseology, so they're saying "can"
- 14 as in it's possible that they caused these
- 15 intestinal problems.
- Q. Doctor, it says right on the drug
- ¹⁷ safety communication, July 3, 2013, "The US Food
- and Drug Administration (FDA) is warning that
- 19 the blood pressure drug olmesartan medoxomil
- ²⁰ (marketed as Benicar, Benicar HCT, Azor,
- ²¹ Tribenzor, and generics) can cause intestinal
- ²² problems known as sprue-like enteropathy."
- 23 That's the words, right?
- A. That's the words.

- A. I don't know this document, but my
- ² impression is that this is computer generated
- ³ from some library at the FDA.
- 4 MR. SLATER: Move to strike from "but"
- ⁵ forward.
- ⁶ Q. Diarrhea, vomiting, and weight loss
- 7 are features of olmesartan-associated
- ⁸ enteropathy, correct?
- ⁹ A. They have been listed in articles as ¹⁰ under that heading.
- Q. You mentioned rechallenges earlier.
- ¹² Remember you mentioned rechallenges?
 - A. Yes.
- Q. Were there a controlled rechallenge
- ¹⁵ and the person's symptoms recur when that
- 16 occurs, that is strong evidence of causation,
- ¹⁷ correct?

13

18

24

- A. In a randomized clinical trial
- 19 setting, absolutely.
- Q. Are you saying the only rechallenge
- 21 that you would ever recognize as being
- 22 legitimate would be one that occurs in a
- ²³ randomized controlled trial?
 - A. It depends on what you're asking the

Page 99

Page 101

- Q. Do you disagree with the FDA?
- ² A. No.

- Q. Now, going to Exhibit 8, Brigham &
- ⁴ Women's Hospital is telling people who want to
- ⁵ read their health library that side effects that
- ⁶ patients can suffer as a result of taking
- ⁷ olmesartan include diarrhea, vomiting, and
- ⁸ weight loss, that's what your institution is
- ⁹ telling patients, correct?
- 10 A. Yes.
- Q. And that's truthful -- let me
- 12 rephrase.
- And that is truthful information,
- 14 correct?
- ¹⁵ A. They're saying what side effects may I
- ¹⁶ notice from receiving this medication. So
- 17 they're listing that as a possible side effect
- 18 that you should report to your doctor or health
- ¹⁹ care professional.
- Q. The reason Brigham & Women's provides
- 21 possible side effects here in that library is so
- ²² patients will be aware of side effects that your
- 23 institution thinks can occur in some patients
- ²⁴ due to taking the drug, right?

- question -- what question you're asking that to
- ² inform.
- ³ Q. If a physician or physicians are
- 4 treating a patient, they rechallenge the patient
- 5 with olmesartan without any other changes to
- 6 what medication the patient is taking or any
- other changes to diet, and the symptoms of
- 8 sprue-like enteropathy happen again on
- ⁹ rechallenge, that is strong evidence of
- 10 causation, correct?
- THE VIDEOGRAPHER: Mr. Slater, this is
- ¹² the videographer speaking. That question broke
- ¹³ up a number of times.
- MR. SLATER: All right. I'll ask it
- 15 again.
- Q. Where a physician is treating a
- patient, the patient has been taken off of
- olmesartan and their symptoms of sprue-like
- enteropathy stopped, and then the doctor puts
- ²⁰ the patient back on olmesartan, and the symptoms
- ²¹ happen again where there were no other changes
- 22 to medication and no other changes to diet, that
- ²³ positive rechallenge is strong evidence of
- ²⁴ causation, correct?

Page 102 Page 104 A. There's more details that I would (Whereupon, Turner Exhibit Number 9, ² need. 2 Gallivan and Brown letter to the 3 Q. Based on my question, that is strong 3 editor titled Olmesartan induced evidence of causation, correct? enterocolitis, was marked for 5 A. No. 5 identification.) Q. There may be other -- hang on. There BY MR. SLATER: ⁷ may be other evidence that you may look at also, Q. Okay. Doctor, I've just handed you or ⁸ but that rechallenge with recurrence of symptoms we've just handed you Exhibit 9, and that's a ⁹ is strong evidence in and of itself of case report that was authored by Dr. Gallivan causation, correct? and Brown in 2014, and that appears on the list 11 A. With the limited data you provided, my 11 of literature you cite in your report, correct? 12 answer is no. A. I cite it. I wouldn't call it a case 13 13 report. It's not. Q. What other data do you need on that 14 question? O. What is it? 15 A. Was there a repeat biopsy. 15 A. It's a letter to the editor. It's in 16 Q. What else do you need to know? the correspondence section of the journal. 17 A. Was the patient -- were there any 17 Q. You cite this in your report, correct? 18 other health conditions at the time. 18 A. Yes. 19 Q. What else do you need to know? 19 Q. Let's look at it. I want to look at 20 20 this case report. First of all, let me ask you A. Was there a control. 21 Q. What else do you need to know? this question. 22 A. Again, you know, we're coming back to 22 Are you familiar with this document? 23 what are you trying to ask. Are you trying to 23 A. Yes, I am. 24 ask if it's an evidence of causation, or are you 24 Q. And if you look at what is reported, Page 103 Page 105 ¹ trying to ask how to manage the patient? ¹ it talks about "a 78-year-old woman with a Q. I'm talking about evidence of ² clinical history of hypertension, ³ causation. ³ gastroesophageal reflux disease, A. That's a much higher standard than how 4 hypercholesterolemia and osteoporosis, who had ⁵ to best manage the patient. People do ⁵ been prescribed olmesartan for four years," ⁶ therapeutic trials all the time, and if they 6 right? ⁷ work out they say it's working for the patient, 7 A. Right. ⁸ I'm happy for them, let's go with that. That's 8 Q. It lists her regular medications, ⁹ not evidence of causation. 9 right? So in this case I would say that your 10 10 A. Right. 11 sort of rechallenge, you know, if the patient 11 Q. "There was no history of recent use of 12 got sick within minutes of taking the tablet, ¹² a nonsteroidal anti-inflammatory medication," ¹³ I'd say, well, that's completely inconsistent 13 correct? ¹⁴ with anything meaningful in the literature, so 14 A. Right. 15 no, sorry. If the patient got sick three years Q. "Over the past four months she had ¹⁶ after starting to take olmesartan again, no, ¹⁶ experienced severe watery diarrhea which ¹⁷ that's not consistent. 17 resulted in three hospital admissions, including 18 So you really are not sufficiently ¹⁸ an ICU admission for acute renal failure 19 detailed for me to answer that question. secondary to dehydration," correct? 20 MR. SLATER: Let's look at document 20 A. Correct. number three, if we could. Not Exhibit 3. Q. She had upper endoscopy and ²² colonoscopy, and "biopsies revealed mild villous 23 23 blunting in the proximal small intestine with

24

²⁴ intraepithelial lymphocytosis and lamina propria

Page 106 Page 108 ¹ inflammation," correct? 1 Oral intake --A. Correct. Q. Have I asked you if it's controlled? Q. If you go further into the next column MR. PARKER: Will you let him finish, ⁴ about halfway down, it says "Serum tissue Adam, please? ⁵ transglutaminase antibodies were negative and 5 MR. SLATER: He's wasting my time. ⁶ the clinical setting did not support an MR. PARKER: And you're wasting our autoimmune enteropathy or immunodeficiency time. syndrome," correct? BY MR. SLATER: A. Correct. Q. Don't tell me whether it's controlled, Q. "Withdrawal of olmesartan and 10 Doctor. ¹¹ atorvastatin with implementation of total 11 MR. PARKER: You're wasting everyone's ¹² parenteral nutrition and oral budesonide 12 time by not letting the witness answer. You produced resolution of diarrhea," correct? don't like his answer, that's fine, move on. 14 A. Correct. 14 MR. SLATER: Maybe you should instruct 15 Q. "On selectively recommencing only your answer to stop talking about whether it's olmesartan and oral intake, the diarrhea controlled when I'm not asking about it and returned," correct? burning -- and wasting our time. A. Correct. 18 MR. PARKER: Instruct my answer? I 19 Q. That is a rechallenge, correct? don't understand your comment. 20 A. That's an uncontrolled rechallenge. MR. SLATER: You should instruct your 2.0 21 Q. It's a rechallenge that was overseen 21 witness to be responsive. ²² and conducted by physicians treating the 22 MR. PARKER: He is responsive. Let's patient, correct? 23 go on, gentlemen. Gentlemen, let's go on. 24 24 A. Where does it say that? MR. SLATER: I'm trying to. You keep Page 107 Page 109 Q. The doctors said that they --¹ saying go on. rephrase. I'll come back to it. ² BY MR. SLATER: After the rechallenge which brought on Q. That is a positive rechallenge, a -- rephrase. 4 correct? The rechallenge was positive because A. Both olmesartan and oral intake were the diarrhea returned, correct? present, it's a positive uncontrolled A. "On selectively recommencing only rechallenge for olmesartan and oral intake. olmesartan and oral intake, the diarrhea MR. SLATER: Move to strike. returned," that's what it says. Q. Doctor, if you keep saying 10 Q. That's a positive rechallenge, right? 10 "uncontrolled" when I don't ask whether it's 11 A. It's not a selective or controlled ¹¹ uncontrolled or not, I'm going to call the rechallenge. It's a positive uncontrolled federal judge in charge of this case and ask him rechallenge, I suppose. ¹³ to instruct you to answer my questions. Okay? 14 14 MR. SLATER: Move to strike. A. Okay. 15 Q. That's a positive rechallenge, 15 Q. So here you go. 16 16 correct? Is that a positive rechallenge? 17 17 A. It is a positive uncontrolled MR. PARKER: Objection. Asked and 18 answered. 18 rechallenge. 19 A. It's a positive uncontrolled 19 Q. Did I ask you if it's uncontrolled? ²⁰ rechallenge. 20 A. By leaving out uncontrolled, you're MR. SLATER: Move to strike. ²¹ implying it's controlled. 22 BY MR. SLATER: Q. Doctor, Mr. Parker will ask you 23 Q. It is a positive rechallenge, correct? questions at the end of the deposition. I

A. It's not a controlled rechallenge.

²⁴ didn't ask you if it's controlled or

Page 110 Page 112 ¹ uncontrolled. Okay? It may matter to you. It A. If you include that they kept her on ² doesn't matter to me. So I would appreciate if oral intake, it's, again, a positive drug ³ you would answer my questions instead of trying withdrawal. 4 to insert what you think may be important to Q. So this is reported in this document ⁵ support whatever opinions it is that you're 5 that the patient had a positive dechallenge, a 6 casting in this case. positive rechallenge, and then another positive MR. PARKER: Objection to your speech, dechallenge, correct? ⁸ and just ask a question, please. A. We can debate, you know, I believe BY MR. SLATER: ⁹ those are all uncontrolled based on what we've 10 discussed, but with that recognition I'll say Q. That is a positive rechallenge, 11 correct? 11 yes. 12 12 A. It is a positive uncontrolled Q. The document goes on to state, "A 13 rechallenge. subsequent colonoscopy, performed four months 14 Q. All right. In the interest of time, after the initial biopsies, showed 15 I'm going to ask, Doctor, that your entire microscopically normal appearing small and large intestine with complete resolution of 16 testimony be stricken and that you be sanctioned ¹⁷ for refusing to answer my questions. Okay? enteropathy-like changes and thickened collagen 18 What I may do -- you know what? And I'm going band." 18 19 to reserve the right during lunch to call the 19 That's what it documents, correct? judge and ask him to instruct you on this. 20 A. I'd like to see biopsies of the 21 A. I'll leave it to you and Mr. Parker to proximal small intestine, since they imply that ²² determine if that's within your rights. 22 those are more severe. 23 Q. Just for the record, did I ask you Q. Look at the next page, Figure 2. And ²⁴ whether it's controlled or uncontrolled? Yes or ²⁴ you can compare it to Figure 1. Do you see that Page 111 Page 113 ¹ no. ¹ in Figure 2 they say that this shows 2 A. No. ² "Improvement in the appearance of histological Q. It's a yes or no question. ³ feature in the proximal small intestine and the colon following withdrawal of the drug"? Do you A. I said no. Q. Okay. So I'll try it again. Would see that? you try to answer my question directly only with A. You asked me about the colonoscopy, what I ask? and I'm pretty certain they could not biopsy the MR. PARKER: Just do that. proximal small intestine on colonoscopy. BY MR. SLATER: Q. They obviously think they biopsied the 10 Q. Would you do that for me? proximal small intestine because they're 11 A. Sure. labeling the picture on the left, correct? 12 Q. That is a positive rechallenge, 12 A. It's not possible. You don't biopsy 13 correct? 13 proximal small intestine on colonoscopy. 14 14 A. It is a positive rechallenge. Q. I understand that. 15 Q. The letter next states, "Her 15 Do you see the picture in Figure 2 on antihypertensive medication was subsequently 16 the left, Figure A? changed to ramipril and the diarrhea again 17 A. Sure. The figure legend says proximal 18 resolved." small intestine. I, therefore, have to conclude 19 That is a dechallenge, correct? that they feel that was a biopsy of proximal 20 A. Making some assumptions, yes. small intestine. You did not ask me about the Q. Assuming that they mean to say we took ²¹ figure, you were asking me about the sentence. ²² her off the olmesartan and put her on this The sentence says colonoscopy.

23

different condition, that is a positive

²⁴ dechallenge with the olmesartan, correct?

Q. Figure 2 on Page 361 states that ²⁴ illustration A is the proximate small intestine.